

ABSTRACT

Transmissivity is restored to a gallium stained substrate by directing an electron beam to the substrate in the presence of an etching gas. For higher concentrations of implanted gallium, the transparency can be substantially restored without reducing the thickness of the substrate. For lower doses of implanted gallium, the transmission is restored to 100%, although the thickness of the substrate is reduced. The invention is suitable for use in the repair of photolithography masks.